



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,046	06/22/2001	Nadine Smolarski-Koff	5102.452US01	6967

23552 7590 09/23/2004

MERCHANT & GOULD PC

P.O. BOX 2903

MINNEAPOLIS, MN 55402-0903

EXAMINER

KLINGER, SCOTT M

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/888,046

Applicant(s)

SMOLARSKI-KOFF ET AL.

Examiner

Scott M. Klinger

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 1-41 are pending.

#### *Priority*

A claim for priority from provisional application 60/213,994 has been made. The effective filing date for subject matter in the application is 26 June 2000.

---

#### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "said determining different categories of exchange rights" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (U.S. Patent Number, hereinafter "Liu") in view of Bergmans (U.S. Patent Number, hereinafter "Bergmans").

In referring to claim 1, Liu shows substantial features of the claimed invention including:

- Composing a data message:

*"In one aspect, the invention provides a method for transferring a message securely from a sender to a recipient over a network and includes at each transfer: creating a message"* (Liu, col. 1, lines 54-56)

- Attachments can be sent with said message:

*"The body of the E-mail message is produced and any attachments are identified (254). In one implementation, the message, including any attachments, optionally can be compressed."* (Liu, col. 16, lines 13-16)

- Determining exchange rights for said recipient, said exchange rights establishing at least one action available to said recipient with respect to handling of the document:

Composing a message for a recipient inherently implies determining that said recipient should have access to said message

- Bundling exchange rights to form said data message.

*"signing the message using the private key of the sender; encrypting the signed message using a public key encryption algorithm and the public key of the recipient producing an encrypted signed message; generating an E-mail message addressed to the recipient; attaching the encrypted signed message as an attachment to the E-mail message; and, transmitting the E-mail message to the recipient."* (Liu, col. 1, lines 58-65)

However, Liu does not show the optional attachment is an image. Nonetheless this feature is well known in the art and would have been an obvious use of the system disclosed by Liu as evidenced by Bergmans.

In analogous art, Bergmans discloses handling security codes for digital image files. Bergmans shows an image file bundled with exchange rights: *"after selection of at least one file by the operator, checking whether the selected file is provided with a security code; if a selected file is provided with a security code, asking the operator to input an access code corresponding to the security code; and if the operator inputs the correct access code, releasing the selected file for the further handling"* (Bergmans, col. 1, lines 60-67)

Art Unit: 2153

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of implementing the system of Liu so as to send an image, such as taught by Bergmans, in order to provide a secure means of transmitting confidential image data.

In referring to claim 2, Liu in view of Bergmans shows substantial features of the claimed invention including the system of claim 1. A person of ordinary skill in the art would have readily recognized the desirability and advantages of including a related text message along with the image file, so as to identify the purpose of the image to the recipient.

---

In referring to claim 8, Liu in view of Bergmans shows,

- The step of encrypting clear text in a selected related text file prior to said bundling.  
*“encrypting the signed message using a public key encryption algorithm and the public key of the recipient producing an encrypted signed message” (Liu, col. 1, lines 59-62)*

In referring to claim 9, Liu in view of Bergmans shows,

- The step of encoding selected audio and/or text files prior to said bundling.  
*“The step of generating an E-mail message can include creating a MIME E-mail message addressed to the recipient. The step of attaching the signed document can include attaching the signed document to the MIME mail message as a MIME attachment. The step of transmitting can include sending the MIME mail message to the recipient.” (Liu, col. 3, lines 6-11)*

In referring to claim 10, Liu in view of Bergmans shows,

- Said encoding includes at least one of compressing and scrambling said audio and/or text files:  
*Liu, col. 1, lines 59-62 (see full quote above), encrypting is a method of scrambling*

Art Unit: 2153

In referring to claim 11, Liu in view of Bergmans shows,

- The step of encrypting said data message after said bundling:

*Liu, col. 1, lines 59-62* (see full quote above)

In referring to claim 12, Liu in view of Bergmans shows,

- The step of MIME encoding said encrypted data message:

*Liu, col. 3, lines 6-11* (see full quote above)

---

In referring to claim 13, Liu in view of Bergmans shows,

- Said at least one image file is compressed:

*Liu, col. 16, lines 13-16* (see full quote above)

In referring to claim 16, Liu shows substantial features of the claimed invention including:

- Composing a data message:

*Liu, col. 1, lines 54-56* (see full quote above)

- Attachments can be sent with said message:

*Liu, col. 16, lines 13-16* (see full quote above)

- Determining exchange rights for said recipient, said exchange rights establishing at least one action available to said recipient with respect to handling of the document:

Composing a message for a recipient inherently implies determining that said recipient should have access to said message

- Bundling exchange rights to form said data message and sending said message.

*Liu, col. 1, lines 58-65* (see full quote above)

However, Liu does not show the optional attachment is an image. Nonetheless this feature is well known in the art and would have been an obvious use of the system disclosed by Liu as evidenced by Bergmans.

In analogous art, Bergmans discloses handling security codes for digital image files. Bergmans shows an image file bundled with exchange rights: *Bergmans, col. 1, lines 60-67* (see

Art Unit: 2153

full quote above)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of implementing the system of Liu so as to send an image, such as taught by Bergmans, in order to provide a secure means of transmitting confidential image data.

In referring to claim 17, although Liu in view of Bergmans shows substantial features of the claimed invention, Liu in view of Bergmans does not show determining if the user is allowed to save or forward the message. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Liu in view of Bergmans.

The system of Liu in view of Bergmans is designed to prevent data from being sent over a network in an insecure matter. A person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to determine if the user is allowed to save or forward the message, in order to prevent confidential/copyrighted information from being sent to unintended recipients, and to prevent said information from being sent in an insecure manner.

In referring to claim 18, Liu in view of Bergmans shows,

- Setting a flag following transmission of said data message to said recipient computer system and generating a prompt if a receipt acknowledgement is not received from said recipient computer system within a threshold period of time following said transmission:  
*"The method can include attaching a return receipt request to the E-mail message and acknowledging the return of a receipt including displaying the receipt to the sender. The opening of the E-mail message by the recipient can be conditioned upon the return of the return receipt."* (Liu, col. 3, lines 1-5)

In referring to claim 19, Liu in view of Bergmans shows substantial features of the claimed invention including the system of claim 1. A person of ordinary skill in the art would have readily recognized the desirability and advantages of including a related text message along with the image file, so as to identify the purpose of the image to the recipient.

Art Unit: 2153

In referring to claim 20, Liu in view of Bergmans shows,

- During said creating said at least one image file, said at least one related image annotation, audio and/or text file and said exchange rights are bundled to form said data message:

*Liu, col. 16, lines 13-16* (see full quote above), all the files for one message are bundled

In referring to claim 21, Liu in view of Bergmans shows,

- The step of encrypting clear text in each text file in said data message prior to said bundling.

*Liu, col. 1, lines 59-62* (see full quote above), any clear text in the message would be encrypted

In referring to claim 22, Liu in view of Bergmans shows,

- The step of encoding each audio and/or text file in said data message prior to said bundling.

*Liu, col. 3, lines 6-11* (see full quote above)

In referring to claim 23, Liu in view of Bergmans shows,

- Said encoding includes at least one of compressing and scrambling each said audio and/or text file.

*Liu, col. 1, lines 59-62* (see full quote above), encrypting is a method of scrambling

In referring to claim 24, Liu in view of Bergmans shows,

- The step of encrypting said data message prior to said transmitting:

*Liu, col. 1, lines 59-62* (see full quote above)



Art Unit: 2153

In referring to claim 25, Liu in view of Bergmans shows,

- The step of MIME encoding said encrypted data message prior to said transmitting:

*Liu, col. 3, lines 6-11 (see full quote above)*

In referring to claim 26, Liu in view of Bergmans shows,

- During said deconstructing, said data message is MIME decoded, decrypted and de-bundled:

*“substantially contemporaneous with sending the message, the method can include prompting the sender for a signature phrase, decrypting the private key of the sender using the signature phrase, applying a hash function to a sender's public key to produce a hash and verifying a status of the sender's public key including submitting the hash to the external key server to enable a look-up of a status of a public key of the sender.” (Liu, col. 2, lines 14-21), a system that encodes, encrypts and bundles a message at a sender inherently implies decoding, decrypting and de-bundling at the recipient*

In referring to claim 27, Liu shows substantial features of the claimed invention including:

- Composing a data message:  
*Liu, col. 1, lines 54-56 (see full quote above)*
- Attachments can be sent with said message:  
*Liu, col. 16, lines 13-16 (see full quote above)*
- Determining exchange rights for said recipient, said exchange rights establishing at least one action available to said recipient with respect to handling of the document:  
Composing a message for a recipient inherently implies determining that said recipient should have access to said message
- Bundling exchange rights to form said data message and sending said message.  
*Liu, col. 1, lines 58-65 (see full quote above)*

However, Liu does not show the optional attachment is an image. Nonetheless this feature is well known in the art and would have been an obvious use of the system disclosed by Liu as evidenced by Bergmans.

Art Unit: 2153

In analogous art, Bergmans discloses handling security codes for digital image files. Bergmans shows an image file bundled with exchange rights: *Bergmans, col. 1, lines 60-67* (see full quote above)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of implementing the system of Liu so as to send an image, such as taught by Bergmans, in order to provide a secure means of transmitting confidential image data.

Although Liu in view of Bergmans shows substantial features of the claimed invention, Liu in view of Bergmans does not show determining if the user is allowed to save or forward the message. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Liu in view of Bergmans.

The system of Liu in view of Bergmans is designed to prevent data from being sent over a network in an insecure matter. A person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to determine if the user is allowed to save or forward the message, in order to prevent confidential/copyrighted information from being sent to unintended recipients, and to prevent said information from being sent in an insecure manner.

In referring to claim 28, Liu in view of Bergmans shows,

- The step of setting a flag at said sender computer system following transmission of said data message to said recipient computer system and generating a prompt if a receipt acknowledgement is not received from said recipient computer system within a threshold period of time following said transmission:

*Liu, col. 3, lines 1-5* (see full quote above)

In referring to claim 29, Liu in view of Bergmans shows substantial features of the claimed invention including the system of claim 1. A person of ordinary skill in the art would have readily recognized the desirability and advantages of including a related text message along with the image file, so as to identify the purpose of the image to the recipient.

Art Unit: 2153

In referring to claim 30, Liu in view of Bergmans shows,

- The step of at the recipient computer system, transmitting a reply data message to the sender computer system:

*Liu, col. 3, lines 1-5 (see full quote above)*

In referring to claim 31, Liu in view of Bergmans shows,

- Said reply data message includes at least one audio and/or text file and said exchange rights:

~~Exchange rights are included in transmissions between the sender and receiver in both directions~~

In referring to claim 32, Liu in view of Bergmans shows,

- The step of setting a flag at said recipient computer system following transmission of said data message to said sender computer system and generating a prompt if a receipt acknowledgement is not received from said sender computer system within a threshold period of time following said transmission:

*"A different way of sending a return receipt is for the recipient to retrieve a second time stamp certificate from the server (which certifies the time the message was received) and then send both the TSC of sending time and TSC of receiving time to the sender, with both TSCs being signed and encrypted. More specifically, the return receipt is:  $PKE(\text{SenderPublicKey}, \text{Signed}(\text{RecipientKey}, \text{TSC}(\text{send time}) + \text{TSC}(\text{receive time}) + \text{OtherInfo}))$ , where OtherInfo may contain the public subject or and other purposes." (Liu, col. 31, lines 35-43)*

In referring to claim 33, Liu in view of Bergmans shows,

- The step of encrypting clear text in each text file in said data message and said reply data message prior to said transmitting.

*Liu, col. 1, lines 59-62 (see full quote above)*

Art Unit: 2153

In referring to claim 34, Liu in view of Bergmans shows,

- The step of encoding each audio and/or text file in said data message and said reply data message prior to said transmitting.

*Liu, col. 3, lines 6-11* (see full quote above)

In referring to claim 35, Liu in view of Bergmans shows,

- The step of encrypting said data message and said reply data message prior to said transmitting:

*Liu, col. 1, lines 59-62* (see full quote above)

In referring to claim 36, Liu shows substantial features of the claimed invention including:

- A data message:

*Liu, col. 1, lines 54-56* (see full quote above)

- Attachments can attached to said message:

*Liu, col. 16, lines 13-16* (see full quote above)

- Determining exchange rights for said recipient, said exchange rights establishing at least one action available to said recipient with respect to handling of the document:

A message for a recipient inherently implies determining that said recipient should have access to said message

- Bundling exchange rights to form said data message and sending said message.

*Liu, col. 1, lines 58-65* (see full quote above)

However, Liu does not show the attachment is an image. Nonetheless this feature is well known in the art and would have been an obvious use of the system disclosed by Liu as evidenced by Bergmans.

In analogous art, Bergmans discloses handling security codes for digital image files. Bergmans shows an image file bundled with exchange rights: *Bergmans, col. 1, lines 60-67* (see full quote above)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of implementing the system of Liu so as to send an image, such as taught by Bergmans, in order to provide a secure means of transmitting confidential image data.

In referring to claim 37, Liu in view of Bergmans shows,

- The data fields in said exchange rights file determine if said at least one recipient is permitted to browse said at least one image file:

The purpose of the exchange rights file is to determine if said at least one recipient is permitted to browse said at least one image file

In referring to claim 38, although Liu in view of Bergmans shows substantial features of the claimed invention, Liu in view of Bergmans does not show determining if the user is allowed to save or forward the message. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Liu in view of Bergmans.

The system of Liu in view of Bergmans is designed to prevent data from being sent over a network in an insecure matter. A person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to determine if the user is allowed to save or forward the message, in order to prevent confidential/copyrighted information from being sent to unintended recipients, and to prevent said information from being sent in an insecure manner.

In referring to claim 39, Liu in view of Bergmans shows,

- Said at least one image file is compressed:

*Liu, col. 16, lines 13-16 (see full quote above)*

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Bergmans and in further view of Campbell et al. (U.S. Patent Number, hereinafter "Campbell"). Although Liu in view of Bergmans shows substantial features of the claimed invention, Liu in

Art Unit: 2153

view of Bergmans is silent as to what is being sent to the recipient. Liu in view of Bergmans does not show the image file and related at least one image annotation are included in an exam record stored in a database. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Liu in view of Bergmans as evidenced by Campbell.

In analogous art, Campbell discloses interactive method and system for managing physical exams, diagnosis and treatment protocols in a health care practice. Campbell shows:

- An exam record database:

*"In one particular client server implementation, the server executes database management software and maintains a series of relational databases (tables). The client and server software is developed using the FoxPro® database development tools. The client-server software is written in FoxPro® database for Windows® NT operating system, and uses the native FoxPro® database file structures."* (Campbell, col. 3, lines 48-54)

- A graphical user interface for the exam records:

Campbell, Figs. 3-14 show a graphical user interface for viewing the exam record.

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to bundle exam record files to the message, such as taught by Campbell, in order to send the confidential exam records in a secure manner.

---

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Bergmans and in further view of Inoue et al. (*A digital watermark technique based on the wavelet transform and its robustness on image compression and transformation*, SCIS, 1998, hereinafter "Inoue"). Liu in view of Bergmans shows substantial features of the claimed invention, including the system of claim 13 (see 103 rejection above). However, Liu in view of Bergmans is silent as to the method of compression. Liu in view of Bergmans does not explicitly show using a wavelet algorithm. Nonetheless this feature is well known in the art and would

Art Unit: 2153

have been an obvious modification to the system disclosed by Liu in view of Bergmans as evidenced by Inoue.

In analogous art, Inoue discloses a digital watermark technique based on the wavelet transform and its robustness on image compression and transformation. Inoue shows using the wavelet transformation for compression and watermarking (Inoue, pg. 2, col. 2, paragraph 2)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to compress and watermark the image using a wavelet algorithm, such as taught by Campbell, in order to be able to extract the watermark if the image is degraded through a common signal and geometric processing procedures.

Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Bergmans and in further view of Inoue et al. (*A digital watermark technique based on the wavelet transform and its robustness on image compression and transformation*, SCIS, 1998, hereinafter "Inoue"). Liu in view of Bergmans shows substantial features of the claimed invention, including the system of claim 39 (see 103 rejection above). However, Liu in view of Bergmans is silent as to the method of compression. Liu in view of Bergmans does not explicitly show using a wavelet algorithm. Nonetheless this feature is well known in the art and would have been an obvious modification to the system disclosed by Liu in view of Bergmans as evidenced by Inoue.

In analogous art, Inoue discloses a digital watermark technique based on the wavelet transform and its robustness on image compression and transformation. Inoue shows using the wavelet transformation for compression and watermarking (Inoue, pg. 2, col. 2, paragraph 2)

Given these teachings, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of Liu in view of Bergmans so as to compress and watermark the image using a wavelet algorithm, such as taught by Campbell, in order to be able to extract the watermark if the image is degraded through a common signal and geometric processing procedures.

Art Unit: 2153

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Klinger whose telephone number is (703) 305-8285. The examiner can normally be reached on M-F 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott M. Klinger  
Examiner  
Art Unit 2153



smk

**FRANTZ B. JEAN  
PRIMARY EXAMINER**